

and add several glass beads. Pipette 25.0 milliliters of methylene chloride into the bottle. Cap the bottle tightly and place on a mechanical shaker. Shake until the polymer is completely dissolved. If any insoluble residue remains, allow the bottle to stand (or centrifuge at a low speed) until a clear supernatant layer appears.

(ii) By means of a microliter syringe, inject 3 microliters of the clear supernatant liquid into the gas chromatograph.

(iii) Measure the area of the resulting styrene monomer peak. Compare the sample peak area with the area produced by the standard styrene monomer solution. Calculation:

Percent residual styrene monomer =  $\frac{\text{Milligrams monomer in standard} \times \text{peak area of sample}}{\text{Peak area of monomer standard} \times \text{sample weight in grams}} \times 30$

(e) *Other specifications and limitations.* The polystyrene and rubber-modified polystyrene identified in and complying with this section, when used as components of the food-contact surface of any article that is the subject of a regulation in parts 174, 175, 176, 177, 178 and § 179.45 of this chapter, shall comply with any specifications and limitations prescribed by such regulation for the article in the finished form in which it is to contact food.

(f) *Nonapplicability.* The provisions of this section are not applicable to polystyrene and rubber-modified polystyrene used in food-packaging adhesives complying with § 175.105 of this chapter.

#### § 177.1650 Polysulfide polymer-polyepoxy resins.

Polysulfide polymer-polyepoxy resins may be safely used as the food-contact surface of articles intended for packaging, transporting, holding, or otherwise contacting dry food, in accordance with the following prescribed conditions:

(a) Polysulfide polymer-polyepoxy resins are the reaction products of liquid polysulfide polymers and polyfunctional epoxide resins, cured with the aid of tri(dimethylaminomethyl) phenol, to which have been added certain optional substances to impart desired technological properties to the resins. Subject

to any limitations prescribed in this section, the optional substances may include:

(1) Substances generally recognized as safe in food and food packaging.

(2) Substances the use of which is permitted under applicable regulations in this part, prior sanctions, or approvals.

(3) Substances named in this subparagraph and further identified as required:

List of substances	Limitations
Bis(2-chloroethyl) formal.	
Bis(dichloropropyl) formal .....	Cross-linking agent.
Butyl alcohol .....	Solvent.
Carbon black (channel process).	
Chlorinated paraffins .....	Cross-linking agent.
Epoxidized linseed oil.	
Epoxidized soybean oil.	
Epoxy resins (as listed in § 175.300(b)(3)(viii)(a) of this chapter) ..	
Ethylene glycol monobutyl ether .....	Solvent.
Magnesium chloride.	
Methyl isobutyl ketone .....	Solvent.
Naphthalene sulfonic acid-formaldehyde condensate, sodium salt.	
Sodium dibutyl naphthalene sulfonate	Wetting agent.
Sodium hydrosulfide.	
Sodium polysulfide.	
β,β',γ,γ'-Tetrachloro normal propyl ether.	Cross-linking agent.
Titanium dioxide.	
Toluene .....	Solvent.
Trichloroethane .....	Cross-linking agent.
1,2,3-Trichloropropane .....	Do.
Urea-formaldehyde resins.	
Xylene .....	Solvent.

(b) The resins are used as the food-contact surface for dry food.

(c) An appropriate sample of the finished resin in the form in which it contacts food, when subjected to ASTM method D968-81, "Standard Test Methods for Abrasion Resistance of Organic Coatings by the Falling Abrasive Tester," which is incorporated by reference (copies may be obtained from the American Society for Testing Materials, 1916 Race St., Philadelphia, PA 19103, or may be examined at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC 20408), using No. 50 Emery abrasive in lieu of Ottawa sand, shall exhibit an abrasion coefficient of not less than 20 liters per mil of film thickness.

[42 FR 14572, Mar. 15, 1977, as amended at 49 FR 10110, Mar. 19, 1984]